AMSAT News Service Weekly Bulletins
Issue: ANS-032
Date: 2009-02-01
Sources: amsat-ans-2009-ans-032-weekly.txt

AMSAT NEWS SERVICE
ANS-032

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

In this edition:

* You Can Tune the Delfi-C3 WebSDR Station
* DELFI-C3 in Science Mode
* Call For Papers/Presentations 35th Eastern VHF/UHF Conference
* SSETI Express on 437.250 MHz?
* Satellite Shorts From All Over
* K6DUE Call Now Part of ISS Amateur Radio Club
* ARISS Status Report for the Week of January 26, 2009

SB SAT @ AMSAT $ANS-032.01
You Can Tune the Delfi-C3 WebSDR Station

AMSAT News Service Bulletin 032.01
>From AMSAT HQ SILVER SPRING, MD.
February 1, 2009
To All RADIO AMATEURS
BID: $ANS-032.01

The Delfi-C3 control team has set up a WebSDR station at their satellite command ground station in Delft, The Netherlands. Their WebSDR station consists of receivers hooked up to a PC and then the internet to enable multiple users to tune in to different signals simultaneously.

At Delft one receiver is for VLF reception and one is currently used for the 70cm satellite segment. Amateur Radio users can access this unique experiment at http://websdr.pa3weg.nl/. Please note that the Delfi team may occasionally retune the receivers to experiment with them.

The hardware was built by Wouter-Jan Ubbels PE4WJ. The WebSDR software was written by Pieter-Tjerk de Boer, PA3FWM. A beta testing phase was begun in November 2008 with a few selected stations. Upon completion of the test phase the software will be made available to the public on the WebSDR project at http://www.websdr.org.

Many thanks to Pieter-Tjerk de Boer, PA3FWM for providing this software and Wouter Jan Ubbels, PE4WJ for building the receiver and providing the high sample rate sound card!

The Delfi-C3 Team's WebSDR receiver was used to copy and plot the downlink from the STARS satellite. Screen shots of this experiment can be viewed at:

http://www.pa3weg.nl/websdr/STARS_snapshot1_1024.png
http://www.pa3weg.nl/websdr/STARS_snapshot2_1024.png
http://www.pa3weg.nl/websdr/STARS_snapshot3_1024.png
http://www.pa3weg.nl/websdr/STARS_snapshot4_1024.png

[ANS thanks Wouter PA3WEG for the above information]

/EX

SB SAT @ AMSAT $ANS-032.02
DELFI-C3 in Science Mode

AMSAT News Service Bulletin 032.02
>From AMSAT HQ SILVER SPRING, MD.
February 1, 2009
To All RADIO AMATEURS
BID: $ANS-032.02

Wouter Jan Ubbels, PE4WJ reported that the Delfi-C3/DO-64 team this week commanded the satellite into its science mode of operation. After examination of telemetry and user reports the team concluded that the linear transponder is no longer operational.

Delfi-C3/DO-64 has been operating in basic mode (a mode in which only housekeeping mode is transmitted) for a number of months in order to investigate this issue.

To make the best use of remaining satellite function the team switched the satellite back to science mode. This mode yields valuable science data about the Thin Film Solar Cell payload and the Autonomous Wireless Sun Sensor payload which are the primary mission goals. The satellite will use the primary downlink at 145.870MHz, transmitting 1200 Baud AX.25 BPSK data. Note that the satellite reboots on 145.870 MHz whene it comes out of eclipse because there is no battery on board. It is possible, that the satellite may reboot on 145.930 MHz backup downlink. If you hear Delfi-C3 / DO-64 on this frequency, your reports are highly appreciated!

In contrast to basic mode operation where the downlink is on contin-uously, downlink drop outs are likely to occur in science mode. It is is possible that the satellite may not transmit during the entire pass while in sunlight. If you hear the satellite, your reports are very much appreciated! The Delfi team regularly posts the satellite status on the Oscar status page at http://oscar.dcarr.org/ and encourage you to do so as well.

Delfi telemetry can be received using the RASCAL program, which is available at http://www.delfic3.nl/rascal At this moment, the total amount of frames has exceeded the 500000 mark which amounts to approx-imately 72.14 MB reported by Amateur Radio stations.

[ANS thanks Wouter Jan Ubbels, PE4WJ and the Delfi-C3 team for the above information]

/EX

SB SAT @ AMSAT $ANS-032.03
Call For Papers/Presentations 35th Eastern VHF/UHF Conference

AMSAT News Service Bulletin 032.03
>From AMSAT HQ SILVER SPRING, MD.
February 1, 2009

To All RADIO AMATEURS
BID: $ANS-032.03

Conference Chairman and Proceedings Editor Bruce Wood, N2LIV
invites you to participate in the 35th Eastern VHF/UHF Conference
by presenting a technical paper or submitting one for publication
in the Conference Proceedings CD.

The aim of the Conference is to share with our fellow VHFer's and
above technical achievements in the field of communication and
experimentation. Your attendance is also welcome and a full program
is scheduled once again this year. If you are interested in present-
ing a paper at the conference or submitting one for the Proceedings
please contact: Bruce Wood, N2LIV at N2LIV@ARRL.NET.

For the technical presentations, PowerPoint presentations are pre-
ferred, but not required. You do not need to be a speaker to have
your material included in the proceedings, just interested in sharing
with your fellow radio enthusiasts, so please send it along by
MARCH 15, 2009.

In addition to our technical presentations and world famous Band
sessions we'll have a new LAB Session with Noise Figure, Gain and
Power Measurements and a Manufacturers Demo area which will be open
Saturday afternoon. We encourage you to bring equipment to test.
We'll also have Greg Bonaguide, WA1VUG of Rohde & Schwarz America to
manage the preamp noise figure and gain measurement Lab Session
(0MHz-50GHz), and Mark Casey, K1MAP to head up the Sunday morning flea
market. Art Holmes W1RZF will head the Prize Donations.

Full details can be found at: http://www.newsvhf.com/vhfconf.html

35th EASTERN VHF/UHF CONFERENCE:
APRIL 17-19, 2009
CROWNE PLAZA HOTEL (860)-741-2211
1 BRIGHT MEADOW BLVD. (OFF RT.5)
ENFIELD, CT 06082

[ANS thanks Bruce Wood, N2LIV for the above information]

/EX

SB SAT @ AMSAT $ANS-032.04
SSETI Express on 437.250 MHz?

AMSAT News Service Bulletin 032.04
>From AMSAT HQ SILVER SPRING, MD.
February 1, 2009
To All RADIO AMATEURS
BID: $ANS-032.04

Graham, G3VZV mentioned that Amateur Radio operators may just have a
a very small chance of also hearing signals from XO53 - SSETI Express.

SSETI Express was launched in November 2005 but, due to a failure
within the power supply system on board, signals were only heard for
a few hours. Investigations made after the launch indicate that it is
just possible that the offending short circuit FET devices may, one day,

go open circuit. This would allow power from the solar panels to again
reach the electronics. It can be assumed that the batteries are pretty
useless by now so it would only be likely to operate when in sunlight.

SSETI Express was on 437.250 MHz - the same frequency as is now being used by Japan's new PRISM satellite launched on January 23, 2009. If by any chance you hear any strange noises on the frequency to please let Graham know. In this context, "strange noises" could be either short bursts of 9k6 data or even some very unusual "CW like" signals. If these signals are present you may be copying a sub 1 second burst of AX25 telemetry every 18 seconds or simple on/off telemetry compris-ing 16 x 100msec carrier pulses which cycle either every 30 seconds or every 2 minutes.

Graham summarized, "Similar satellite returns have happened in the past!"

[ANS thanks Graham, G3VZV for the above information]

/EX

SB SAT @ AMSAT $ANS-032.05
Satellite Shorts From All Over

AMSAT News Service Bulletin 032.05
>From AMSAT HQ SILVER SPRING, MD.
February 1, 2009
To All RADIO AMATEURS
BID: $ANS-032.05

+ Satellite DX! Congratulations Joe, K3SZH for 8000 QSOs via AO-7. Joe was copied in Brazil by PU2BFG in Mode B. Jean, F2IL has now completed 4000 plus qsos via AO7. Congratulations Zlatko, 9A2SB on your 1000 plus QSOs on AO7 in modes A&B. On January 15 Clare VE3NPC worked CU2JX via AO-51 mode L/U.

+ Mike DK3WN has released software for the two new Japanase PRISM and STARS satellites - CW TLM decoders. See: http://www.dk3wn.info/software.shtml

+ Universe Today has a series of YouTube videos which give you a personal tour of the ISS:

http://www.universetoday.com/2009/01/26/take-a-personal-tour-of-the-iss/

+ Bob, WB4APR is asking for help from antenna experts on very-short, yet broadband antennas. Size: on the order of 3 feet or less; operating freq: 10 MHz; BW: 500 KHz. Contact wb4apr@amsat.org if you can help.

+ Congratulations to Roberto, IW5BSF who has been named Coordinator A.R.I Satelliti ITALY by the Associazione Radiomatori Italy.

[ANS thanks everyone for the above information]

/EX

SB SAT @ AMSAT $ANS-032.06
K6DUE Call Now Part of ISS Amateur Radio Club

AMSAT News Service Bulletin 032.06
>From AMSAT HQ SILVER SPRING, MD.
February 1, 2009
To All RADIO AMATEURS
BID: $ANS-032.06

Via Amateur Radio Newsline Report 1642 - January 30 2009

The K6DUE callsign of the late NBC Newsman Roy Neal is now the call of the International Space Station Amateur Radio Club. According to ARISS International Chairman Frank Bauer, KA3HDO, the call letters will initially be used for ground station operations but may be used for other activities in the future.

For those not aware, Roy Neal, K6DUE, spent more than five decades as a broadcaster specializing in science and aerospace reporting for the National Broadcasting Company. He is generally credited with convincing then NASA chief Jess Moore to permit ham gear to be flown on board the early space shuttle missions. The first of these was STS-9 that carried Spacelab One and Mission Specialist Owen Garriott, W5LFL, who made the first-ever ham radio contacts from a spacecraft on-orbit.

After Garriott's successful flight, Neal and several others formed the group known as SAREX -- the Shuttle Amateur Radio Experiment. Later called the Space Amateur Radio Experiment, it was a program that promoted and supported the use of amateur radio by astronauts in low earth orbit aboard the United States Space Shuttle. This, to communicate with other amateur radio stations around the world especially those in classrooms as a scientific demonstration. It was superseded by the Amateur Radio on the International Space Station or ARISS program that we hear so much about today.

Roy Neal, K6DUE, passed away at age 82 on August 15, 2003, following open heart surgery. On November 11th 2003 the Amateur Radio on the International Space Station organization announced an on-the-air event to commemorate Roy Neal's lifetime of achievements in ham radio. Now, with the acquisition of his K6DUE call letters by the International Space Station Amateur Radio Club, Roy Neal's contributions to manned ham radio operations from space will live on in perpetuity.

[ANS thanks ARNewslineï¿½ and Frank Bauer, KA3HDO for the above information]

/EX

SB SAT @ AMSAT $ANS-032.07
ARISS Status Report for the Week of January 26, 2009

AMSAT News Service Bulletin 032.07
>From AMSAT HQ SILVER SPRING, MD.
February 1, 2009
To All RADIO AMATEURS
BID: $ANS-032.07

1. School Contacts

An ARISS contact was completed with Castor Valley Elementary School in Greely, Ontario, Canada on Tuesday, January 27. A space club at the school was formed for grades 1-8. Students from this group asked questions of the astronaut. Students have learned about the ISS via the internet and videos and through guest speakers. They have been taught the correct radio protocol and have tracked and plotted the course of the ISS. All classes have taken part in space projects and activities. Media, members of the community, the school board and other dignitaries were invited to attend.

An ARISS contact was completed for CERAM EAI in Sophia Antipolis, Alpes Maritimes, France. The contact will take place on Thursday,

January 29 via telebridge station VK4KHZ in Australia. CERAM University conducts research projects in aviation, engineering and IT. Amateur radio communications was introduced to students to prepare for the contact.

Ecole & Collï¿½ge Jean XXIII, a private primary & secondary school in Pamiers, France, completed an ARISS contact on Friday, January 30. Five hundred students, ages 3 to 15 years old, attend the school. Students in the third cycle classes (3rd - 5th grades) and those in their second year of secondary school have studied radio communications. Radio operators from "l'Institut de Dï¿½veloppement des Radiocommunications par l'Enseignement" (IDRE) have introduced radio technology to the children. Topics included remote command use, introduction to Morse code, ham radio phone contact, distress beacon search, electronic kits, and different ham radio station possibilities. This ARISS activity has been incorporated into the educational subjects of Astronomy, History of Space Exploration, Geography and Writing.

Humber College Institute of Technology and Higher Learning in Toronto, Ontario, Canada has been scheduled for an ARISS contact on Monday, February 2 at 17:29 UTC. The school has concluded an extensive research period in how waves travel through space and the Earth's atmosphere and plans to put theory into practice. It has assembled the primary ground station right on the main campus, and it is hoped that it will inspire future students in conducting similar studies. With help from the media department and a school contest, the school has been working to involve every student in this project. With over seventy thousand students, which include both full-time and part-time students, the college is excited to promote this project within the community.

Pilton Bluecoat Junior School in Barnstaple, Devon, England has been scheduled for an ARISS contact on Friday, February 6 at 14:48 UTC. The school has planned an event with the theme "Our Home in Space - The Final
Frontier," in which students learn about Earth as part of the wider universe. All classes took part in the initial selection of questions; the final questions were chosen by the school council. Students have studied the development of the ISS and the history of man in space. Older children have written press releases.

Stï¿½dtisches Gymnasium Herzogenrath in Herzogenrath, North Rhine-Westphalia, Germany has been scheduled for an ARISS contact on Saturday, February 7 at 10:32 UTC. The school has an amateur radio club whose members initiated the ARISS contact. The students prepared a radio exhibition that was shared with the school. The English and History departments have also participated in this activity. Students competed in an essay contest and created projects related to the "Space Race." Newspapers and television stations have been invited to cover the event.

College of Agriculture, Central Agricultural University in Imphhal, Assam, India has been scheduled for an ARISS contact on Sunday, February 8 at 10:06 UTC via telebridge station VK4KHZ in Australia.

2. Children's Hospital Contact Successful

On Tuesday, January 20, patients at the Children's Hospital of Eastern Ontario in Ottawa, Canada spoke with Sandra Magnus, KE5FYE, during an ARISS contact. The children asked 16 questions of the astronaut via telebridge station ON4ISS in Belgium. Due to the hospital's infection protocol, media was kept from the event and unable to access or interview the students directly. A representative from another children's hospital in Calgary was present and

was very impressed with the event; he plans to submit an ARISS application for his hospital. The audio was fed into the EchoLink AMSAT and JK1ZRW servers and into the IRLP Discovery reflector 9010. EchoLink received 20 connections from 14 countries, including one link node and two repeaters.

3. Astronaut Training Status

On Friday, January 23, Jeff Williams, KD5TVQ, received a refresher course covering the ARISS radio equipment and operations. Williams is scheduled to launch to the ISS in September and will take over as commander in November 2009.

4. General Voice Contacts

Mike Fincke, KE5AIT and Yuri Lonchakov, RA3DT made several general voice contacts over the last week. Among those contacted were stations in France, Spain, Chile, Italy and the Netherlands.

5. ARRL QST Covers ARISS News

The American Radio Relay League (ARRL) printed 4 ARISS news items in its February 2009 issue of QST.

On page 12, the "In Brief" column (a "what's been happening at ARRL recently) mentions ARISS' 25th commemorative activities

"Inside Hq -- 2008 Year-End Review" (page 13) mentions that ARISS "celebrated its 350th QSO (contact)."

A story on pages 54-55, "Amateur Radio and Public Education Make for a Bright Future" is about a Kentucky high school teacher who included amateur radio in his science curriculum. There is one small part about him being excited about his students being able to garner an ARISS contact.

The "75, 50, and 25 Years Ago" column on page 102 shows the cover of February 1984 QST with Owen Garriott on the front, and the column lists two bullet items for the February 1984-25 years-ago section: the first being about Owen on the cover, and the second being that QST printed an interview of Owen, and it says: "We all hope that Amateur Radio will continue to be a part of the space shuttle missions."

[ANS thanks Carol, KB3LKI for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office. With that recall the amateur radio operator who thought he saw an eye doctor on an Alas-kan island, but it was just an optical Aleutian.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM